

### **REMARKS**

Favorable reconsideration of this application in light of the following remarks is respectfully requested. Applicant sincerely appreciates the telephone interview of May 11, 2004 granted to Applicant's counsel, during which Applicant's counsel was advised that a new, non-final office action was forthcoming. Furthermore, Applicant wishes to thank the Examiner for allowing claims 8-14 and allowing claims 2-7 and 16-20 if rewritten in independent form. No new matter has been introduced.

### **Drawings**

The drawings are objected to by the Draftsperson under 37 CFR 1.84 such that corrected drawings are required. Applicant has submitted revised formal drawings herewith.

Additionally, the drawings are objected to as failing to comply with 37 CFR 1.84(p)(5). In particular, the following reference numbers are not mentioned in the description: on figure 3, reference numbers A, B, E, G, 320, 348, 350, 370, 372, 374 and 392; on figure 4, reference numbers 1, 402-405, 407-411, 413, 420, 423 and 424; and on figure 8, reference number 802. Accordingly, these reference numbers have been removed from the figures, with the exception of reference number 403. The specification has been amended to include reference number 403, referring to a balun.

Furthermore, Fig. 1 is objected to under MPEP 608.02(g) since it should be designated by a legend such as --Prior Art--. Accordingly, Fig. 1 has been as --Prior Art--.

The following reference numbers have been added to the drawings: in Fig. 1, transistor 101; and in Fig. 2, transistors 201 and 201. The specification has been amended to include these reference numbers.

### **Claim Objections**

Claims 1, 3, 10, 15 and 17 are objected to due to various informalities. Claims 1 and 15 are objected to because they include multiple periods. Accordingly, claims 1 and 15 have been amended to eliminate the multiple periods by replacing, for example, "a." with --a)--.

Claims 3, 10, 15, and 17 are objected to because "Radio" should be replaced with --radio-- before "frequency signal." Claims 3, 10, 15 and 17 have been amended accordingly.

Claim 15 is objected to because "Mixer" on line 1 of claim 15 should be replaced with --mixer--. Claim 15 has been amended accordingly.

#### Rejection under 35 U.S.C. §102

Claims 1 and 15 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,278,872 (Poulin et al., hereinafter Poulin). Independent claim 1 is directed at a passive field effect transistor mixer that includes, in part, a pair of field effect transistors, each transistor having a gate, a source, a drain, and a channel between the source and the drain. One of the source and the drain of a first of the two transistors is coupled at a node to one of the source and the drain of the other of the two transistors, and the node is coupled to ground.

Poulin discloses a mixer 200 that includes four MESFETs configured in a bridge configuration. As shown in Poulin at Fig. 3, the source and drain of a first of two transistors 202 is coupled at a node to one of the source and drain of the other of the two transistors 206. However, the node in Poulin is not coupled to ground. This is very different from the mixer of claim 1, which requires that one of the source and the drain of a first of the two transistors is coupled at a node to one of the source and the drain of the other of the two transistors, and *the node is coupled to ground* (see the subject application at Fig. 7, shown below). The mixer 200 in Poulin thus requires an additional balun 212 for retrieval of the IF signal.

Since Poulin does not teach every element of amended independent claim 1, claim 1, as amended, is not anticipated under 35 U.S.C. §102(e) by Poulin and is allowable. Independent claim 15 requires a first switch coupled at a node to ground, the node coupled to a second switch. Accordingly, claim 15 is allowable for the same reasons as discussed above with regard to claim 1, and is further allowable in view of the additional limitations set forth therein.

It is believed that the application is now in order for allowance and Applicant respectfully request that a notice of allowance be issued. If any extension is required,

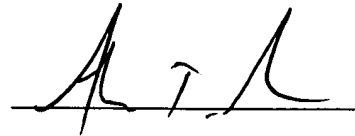
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applicant hereby petitions for same and requests that any extension or other fee required may be charged to deposit account number 19-4972.

If the Examiner has any questions as to the allowability of the currently pending claims or if there are any defects which need to be corrected, the Examiner is invited to speak to the Applicant's counsel at the telephone number given below.

DATE: August 23, 2004

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'A. J. Smolenski', written over a horizontal line.

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